

WINNERS OF THE FY 2003 COMPETITION UNDER THE DEFENSE UNIVERSITY RESEARCH INSTRUMENTATION PROGRAM -- Page 1 of 4

Principal Investigator	Institution	ST	Brief Description of Instrumentation or Research it Supports	Awarding Office*
Cammy Abernathy	University of Florida	FL	Chemical Vapor Deposition System	AFOSR
Matthew H. Alford	University of Washington	WA	Moored Profiling System	ONR
Dana Anderson	University of Colorado	CO	Atom Optics Testbed and Vacuum Cell System	ARO, ONR
Alexander A. Balandin	University of California - Riverside	CA	High-Resolution Micro-Raman Spectroscopy	ONR
John S. Baras	University of Maryland - College Park	MD	High-Speed Modeling and Simulation Testbed for Networked Systems	ARO
Michael Bass	University of Central Florida	FL	Equipment for Research on Novel 2-dimensional and True 3-Dimensional Displays	ARO
Jennifer T. Bernhard	University of Illinois - Urbana-Champaign	IL	Research on Low-Profile Radiators in Non-Periodic Wideband Arrays	ARO
Abhijit Bhattacharyya	University of Arkansas - Little Rock	AR	Probe station and driver for Characterizing Micro-Electro-Mechanical Systems	ARO
Kenneth Birman	Cornell University	NY	Scalable Mission Information Systems	AFOSR
Jeffrey Bons	Brigham Young University	UT	Instrumentation for Low-Pressure Turbine Separation Control	AFOSR
Kenneth Brentner	Pennsylvania State University	PA	Parallel Computers for Large-Scale Particle Simulations Methods	MDA
April Brown	Duke University	NC	Streak Camera for Photoluminescence of Wide Bandgap Structures	ARO
Arnold Burger	Fisk University	TN	Electro-Dynamic Gradient System for Semiconductor Crystal Growth	AFOSR
Indira Chatterjee	University of Nevada - Reno	NV	Equipment for Investigating Radio Frequency and Microwave Bioeffects	AFOSR
Noel T. Clemens	University of Texas - Austin	TX	Particle Image Velocimetry for Study of Shock-Induced Turbulent Separation	ARO
Jonathan D. Cohen	Princeton University	NJ	Computing Environment for Computational Modeling of Brain Functions	ONR
Terrence J. Collins	Carnegie Mellon University	PA	Instrumentation for Research on Novel, Potent, Non-Toxic Chemical Material	ARO
James Dickens	Texas Tech University	TX	Ultra-Fast Imaging System	AFOSR
David Dinges	University of Pennsylvania	PA	Instrumentation for Investigating Sleep Loss and Jet-Lag	AFOSR
Dana D. Dlott	University of Illinois - Urbana-Champaign	IL	Ultrafast Vibrational Spectroscopy of Nanoenergetic Materials	ARO
Thomas G. Dobie	University of New Orleans	LA	Vibration Testing System for Human Factors and Materials Research	ARO
William Alan Doolittle	Georgia Institute of Technology	GA	Materials Development and Performance Characterization	ONR
David R. Dowling	University of Michigan	MI	Hydrodynamic Sound Source Localization System	ONR
Eric T. Eisenbraun	State University of New York - Albany	NY	Nano-Structural Coatings for Defense Applications	ARO
Harindra J. Fernando	Arizona State University	AZ	Stereoscopic Particle Velocimetry System for Flow Measurements	ONR
Harold Fetterman	University of California - Los Angeles	CA	Polymer Optical Equipment Systems	AFOSR
David M. Fratantoni	Woods Hole Oceanographic Institution	MA	Autonomous Glider Operation	ONR
Peretz P. Friedmann	University of Michigan	MI	Main Rotor Test Stand for Active Control of Vibration and Noise	ARO
Thomas Gallagher	University of Virginia	VA	Optical and Millimeter-Wave Double-Resonance Spectroscopy	AFOSR
Leonid Glebov	University of Central Florida	FL	Femtosecond Laser for Photo-Thermo-Refractive Glass	MDA
William A. Goddard III	California Institute of Technology	CA	Multi-Scale Modeling for Material Optimization and Design	ARO, ONR
David Goldhaber-Gordon	Stanford University	CA	Investigation of Gated Electronic Nano-Structures	AFOSR
Philip Goode	New Jersey Institute of Technology	NJ	63-inch Solar Telescope	AFOSR
H Thomas Hahn	University of California - Los Angeles	CA	Characterization System for Polymer Nano-Composites	AFOSR
Matthew J. Hawkins	University of Delaware	DE	Acoustically Quiet System For Cape Henlopen Replacement Vessel	ONR

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Sophia E. Hayes	Washington University	MO	Polarized and Defected Nuclear Magnetic Resonance for Semiconductor Study	ARO
Robert E. Hebner	University of Texas - Austin	TX	Hysteresisgraph System	ONR
Joan M. Henson	Montana State University	MT	Equipment for Research on Fungal-Plant Mutualism	ARO
Richard Holz	Utah State University	UT	Atomic Force Microscopy System	AFOSR
Bruce M Howe	University of Washington	WA	Seaglidors	ONR
Daniel R Ilgen	Michigan State University	MI	Team Structure and Adaptability in Changing Situations	ONR
Stephen Jacobs	University of Rochester	NY	Surface Metrology for Precision Aspheric and Conformal Optics	MDA
Anil K. Jain	Michigan State University	MI	Pattern Recognition and Image Processing	ONR
William E. Johns	University of Miami	FL	Doppler Current Meters for Coastal and Marginal Sea Research	ONR
Eric Johnson	University of Central Florida	FL	Tunable Antenna-Coupled Uncooled Infrared Focal Plane Arrays	MDA
Ibrahim Karaman	Texas A&M University	TX	Magneto-Thermo-Mechanical Testing of Magnetic Shape Memory Materials	ARO
John F. Kearney	University of Alabama - Birmingham	AL	Flow Cytometer for Development Studies on B. anthracis Spore-Ligand	ARO
Wolfgang Ketterle	Massachusetts Institute of Technology	MA	Quantum-Degenerate Gases	ONR
Lyon King	Michigan Technological University	MI	Ground-testing Apparatus for Investigating Condensable Propellants	AFOSR
Sanjay Krishna	University of New Mexico	NM	Femtosecond Mid-Infrared Pump-Probe Spectroscopy System	ARO
William A Kuperman	University of California - San Diego	CA	Autonomous Underwater Vehicle	ONR
Andrew Kurdila	University of Florida	FL	Vision-Based Control	AFOSR
Ming-Jun Lai	University of Georgia	GA	Analysis of Scattered Interpolation Methods	ARO
Donald W. Landry	Columbia University	NY	Instrument for Small Molecule Discovery Research	ONR
Ming C. Lin	University of North Carolina - Chapel Hill	NC	Physically-Based Interaction with Massive Data Sets	ARO
Curtis A. Link	Montana Tech of the University of Montana	MT	Rapid Deployment 3-Dimensional Seismic Data Acquisition System	ARO
Chung-Chiun Liu	Case Western Reserve University	OH	Photoplotter for Microprocessing of Sensors, Micro Fuel Cells and Micro Batteries	ARO
Yicheng Lu	Rutgers University	NJ	Ultraviolet Optical Characterization System for Zinc Oxide-Based Materials	AFOSR
Gerald Lukovsky	North Carolina State University	NC	Processing Chamber Instrumentation for Soft X-ray Photoemission Spectroscopy	ARO
Gary A. Maddux	University of Alabama - Huntsville	AL	Advanced Visualization Display for Weapons System Training	ARO
Alexei A. Maradudin	University of California - Irvine	CA	Laser Interferometric Surface Profilometer	ARO
Jon-Paul Maria	North Carolina State University	NC	Instrumentation for High-Frequency and High-Temperature Impedance Analysis	ARO
John T. Markert	University of Texas - Austin	TX	Scanning-Tunneling Microscope for Magnetic Resonance Force Microscopy	ARO
Sandra P. Marshall	San Diego State University	CA	Networked Eye-Tracking Apparatus	ONR
Pino Martin	Princeton University	NJ	Equipment for Studying Turbulent Hypersonic Flows	AFOSR
Michael V. Mascagni	University of Florida	FL	Distributed and Grid Computing	ARO
Dimitri N Mavris	Georgia Institute of Technology	GA	Collaborative Visualization Environment for Complex System Design	ONR
Michael Mendillo	Boston University	MA	Imaging Science Instrumentation	ONR
James A Mercer	University of Washington	WA	Acoustic Research	ONR
Matthew Miller	Cornell University	NY	Mechanical Loading, Synchrotron X-Ray Diffraction System	AFOSR

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John R. Morris	Virginia Polytechnic Institute and State University	VA	Reactions of Chemical Warfare Agent Simulants on Surfaces	ARO
John F. Muth	North Carolina State University	NC	Pulsed Laser Deposition System	ONR
John Nees	University of Michigan	MI	Laser-Target System for Studies of Relativistic Nonlinear Optics	ARO
Keith A. Nelson	Massachusetts Institute of Technology	MA	Equipment for Semiconductor Coherent Control	ARO
Richard Neu	Georgia Institute of Technology	GA	Elevated Temperature Fretting Apparatus	AFOSR
Daniel Neumark	University of California - Berkeley	CA	Zero Electron Kinetic Energy and Velocity Map Imaging Spectroscopy	AFOSR
Arogyaswami J. Paulraj	Stanford University	CA	Radio Propagation Measurement System and Computer Cluster	ONR
Donald J. Perkey	University of Alabama - Huntsville	AL	System for Retrieving Surface Parameters for the Atmospheric Boundary Layer	ARO
Nasser Peyghambarian	University of Arizona	AZ	Optical Fiber Lasers	AFOSR
Shashi Phoha	University of Pennsylvania	PA	Surveillance Sensor Networks: Operational Testbed	ARO
Christophe Pierre	University of Michigan	MI	Scanning Laser Vibrometry System	AFOSR
Stephen Pope	Cornell University	NY	System for Simulating Turbulence and Combustion	AFOSR
John Price	University of Colorado	CO	Molecular Rotor Characterization: Ultra-High Vacuum Dielectric Spectrometer	ARO
James Rankin	Ohio University	OH	Light Detecting and Ranging (LIDAR) Navigation and Surveillance System	AFOSR
Britt Raubenheimer	Woods Hole Oceanographic Institution	MA	Swath Sensor Array	ONR
Laura Ray	Dartmouth College	NH	Instrumentation for Communication and Hearing Protection	AFOSR
Asok Ray	Pennsylvania State University	PA	Instrumentation for Complex Systems Failure Collaboratory	ARO
Richard F. Riesenfeld	University of Utah	UT	Five-Axis High Speed Machining	ARO
Patrick Roblin	Ohio State University	OH	Non-Linear Radio-Frequency Research Instrumentation	AFOSR
Donald O Rockwell	Lehigh University	PA	High-Resolution Stereo and Orthogonal Imaging System	ONR
James M. Sabatier	University of Mississippi	MS	Tilt Sensor Vibration Measurement System	ARO
S. Shankar Sastry	University of California - Berkeley	CA	Adaptive Coordinated Networks of Multi-Model Multi-Agent Teams	ARO
Laura Schaefer	University of Pittsburgh	PA	Visualization Equipment for Investigating Turbulent Combustion	AFOSR
John R Scully	University of Virginia	VA	Characterization of Multi-Functional Corrosion Resistant Coatings	ONR
Sudipta Seal	University of Central Florida	FL	Plasma Processing for Nanoparticles to Bulk Materials	ONR
John H. Seinfeld	California Institute of Technology	CA	Atmospheric Research Instrumentation in Support of Twin Otter Aircraft	ONR
Mansoor Sheik-Bahae	University of New Mexico	NM	Instrumentation for All-Solid-State Optical Cryocooler Systems	AFOSR
Thomas R Shrout	Pennsylvania State University	PA	Digital Ultrasound Research	ONR
Marek Skowronski	Carnegie Mellon University	PA	Studies of Degradation of Wide-Bandgap Devices	ONR
Mani B Srivastava	University of California - Los Angeles	CA	Heterogeneous Air- and Ground-Based Autonomous Systems	ONR
Andrew J. Steckl	University of Cincinnati	OH	Measuring Dopant Composition for Rare-Earth-Doped Electroluminescent Devices	ARO
Frederick Stern	University of Iowa	IA	Towing-Tank Maneuvering Test Flow-Map Measurement System	ONR
Carlos R. Stroud	University of Rochester	NY	Quantum States of Light Using Electromagnetically-Induced Transparency	ONR
Scott D Sudhoff	Purdue University	IN	Genetic Optimization Processing Array	ONR
Bryan H. Suits	Michigan Technological University	MI	Magnetic Resonance Explosive Detection	ONR

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Shelton Taylor	University of Virginia	VA	Instrumentation for Understanding of Non-Chromate Inhibitors	AFOSR
Eric J. Terrill	University of California - San Diego	CA	Autonomous Ocean Profilers for Extreme Weather	ONR
Gregory N. Tew	University of Massachusetts - Amherst	MA	Characterizing Macromolecular Samples for Self-Assembly and Nanotechnology	ARO
Lang Tong	Cornell University	NY	Mobile Wireless and Sensor Network Testbed	ONR
Michael S. Triantafyllou	Massachusetts Institute of Technology	MA	Flow Visualization Apparatus for Flow-Induced Vibrations	ONR
Charles Tseng	Purdue University	IN	Equipment for Bio-Effects Research	AFOSR
Vladimir Tsukruk	Iowa State University	IA	Near-Field Optical and Atomic Force Microscope	AFOSR
Stanislav Uryasev	University of Florida	FL	Decision-Making Network Analysis System	AFOSR
Daniel van der Weide	University of Wisconsin - Madison	WI	Measurement System for Electronic Terahertz Sensing	AFOSR
Richard Van Duyne	Northwestern University	IL	Instrumentation for Multidimensional Spectroscopy, Sensing, and Microscopy	AFOSR
John F. Vesecky	University of California - Santa Cruz	CA	High-Frequency Radar Instrumentation	ONR
Stephan Von Molnar	Florida State University	FL	Fabrication and Characterization of Spin Electronic Devices	ONR
Gilbert C. Walker	University of Pittsburgh	PA	Tunable Infrared Laser for Use in Infrared Near-Field Microscopy	ONR
Scott C. Weaver	University of Texas Medical Center - Galveston	TX	Automated Sequencing for Biological Defense Research	ARO
William P. Weber	University of Southern California	CA	Rheometric Dynamic Mechanical Thermal Analyzer	ONR
Tomasz Wierzbicki	Massachusetts Institute of Technology	MA	Dynamic Test System for Studying Fracture Due to Explosive and Impact Loads	ONR
Peter F. Worcester	University of California - San Diego	CA	Low-Frequency, Broadband, High-Efficiency, Underwater Acoustic Sources	ONR
Robert Mark Worden	Michigan State University	MI	Protein Production for Biosensors, Biocatalysis, and Fuel Cells	ONR
Ya-Hong Xie	University of California - Los Angeles	CA	Topographic and Spectroscopic Imaging of Self-assembled Quantum Dots	ARO
Yang Yang	University of California - Los Angeles	CA	Instrumentation for Studying Surface Characterization of Organic Electronics	AFOSR

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